

REMARKS

With the entry of the foregoing amendments, claims 8-16, 26, 27 and 34-47 remain in this application. All other claims have been cancelled without prejudice in view of the prior restriction requirement. Applicant reserves its right to file divisional applications covering those claims and their subject matter.

On page 2 of the Official Action, an objection is raised to at least pages 10 and 19 of the specification as amended in the prior Amendment because of the typographical correction concerning "sodium metabisulfite." Support for this typographical correction is found in the originally filed application, for example, on page 17, lines 10-11. Accordingly, applicant respectfully requests the withdrawal of the Section 132 objection to the amended specification.

Near the middle of page 2 of the Office Action, applicant notes with appreciation the consideration of the information disclosure statements filed in this case.

Near the lower portion of page 2 of the Office Action, claims 15 and 16 stand objected to because of a typographical error. In line with the helpful suggestions of the examiner, claims 15 and 16 have been amended.

At the bottom of page 2 of the Office Action, claims 14, 27, 36 and 37 stand rejected under 35 U.S.C 112, first paragraph, as allegedly failing to comply with the written description requirement. These claims are rejected because of alleged new matter concerning the phrase "sodium metabisulfite". Applicant respectfully requests the withdrawal of this rejection, like the specification objection above, in view of the original application that includes this phrase, for example, on page 17, lines 10-11, and as amended in the specification by way of applicant's Amendment of January 6, 2003. As the examiner can appreciate, one skilled in the art upon

reading the disclosure and being familiar with catalyst chemistry would understand that the phrase sodium metabisulfite is the proper catalyst disclosed in this application.

On page 3 of the Office Action, claims 8-16, 26, 27 and 34-37 stand rejected under 35 U.S.C. 102(b) or (e) as allegedly anticipated by or, in the alternative, under 35 U.S.C. 103(a) as allegedly obvious over Horowitz (U.S. Patent 3,401,049) as applied to claims 8-10, 12-16 and 34, Horowitz et al (U.S. Patent 5,232,748) or Sanduja et al (U.S. Patent 6,368,369). Applicant respectfully requests the withdrawal of this rejection for the following reasons.

Applicant's claims require a specific coating composition, certain ingredients and certain percentages which are not disclosed or suggested by the three cited references, either individually or in any combination. Moreover, the three cited references do not disclose the requisite coating composition that is suitable and effective in chemically grafting to an oil, fuel, coolant or air filter material and increases its filtration efficiency. In this regard, applicant considers that its preamble is a limiting preamble that further distinguishes the claimed invention from the cited art. Nevertheless, applicant has amended its independent claims to confirm that the subject matter in the preamble of its independent claims is a limitation that further distinguishes its invention from the cited prior art (i.e., as confirmed by the wherein phrase at the end of each independent claim).

Turning to the cited prior art, none of those references discloses or suggests the claimed "coating composition." Contrary to the claimed invention that requires a catalyst and a graft initiator in the "coating composition," the '049 composition does not include any graft initiator, provides no suggestion to utilize one in the '049 composition, and provides no suggestion of the applicant's claimed percentages of its particular ingredients. Instead, the '049 patent discloses and repeatedly teaches that a silver or silver oxide is distributed on the surface of non-metallic

substrates such as cellophane before any composition is coated thereon. As specifically taught by the '049 patent, "the resulting object having bodies of silver oxide or metallic silver formed in situ throughout at least the surface layer thereof is then contacted with a polymerizable composition which is or becomes polymerizable in contact with metallic silver or silver oxide ..." See, column 2, lines 1-5. This disclosure and other similar disclosures throughout the specification and claims of the '049 patent confirm that its polymerizable composition does not include each of the ingredients in applicant's claims. In addition, the '049 patent does not disclose or suggest the percentages of the various ingredients utilized in applicant's "coating composition." Finally, the '049 patent does not disclose or suggest that the claimed "coating composition" can be chemically grafted to an oil, fuel, coolant or air filter material and that the coated material can withstand the harsh environment within which an oil, fuel, coolant or air filter material must operate. Indeed, the '049 patent repeatedly discusses the use of a polymerizable composition (which is different than and does not include all of the necessary ingredients of the applicant's invention) for use with "cellophane." As the examiner can appreciate, cellophane can not act as an oil, fuel, coolant or air filter material. It is the antithesis of such a material. Accordingly, the '049 patent does not disclose or suggest the claimed invention.

Similarly, the '748 patent fails to disclose or suggest the claimed invention. In fact, the '748 patent is quite similar to the '049 patent -- including its disclosure and teachings of compositions used with "cellophane." See column 1, line 7. The '748 patent discloses and teaches the use of a "preactivating solution" and a "grafting solution." See, for example, Example I in column 4. As confirmed by the "grafting solution" in Example I of the '748 patent, that solution does not include the applicant's claimed "coating composition" -- that requires the

use of a graft initiator, certain components in certain percentages, and wherein the coating composition is suitable and effective in chemically grafting to an oil, fuel, coolant or air filter material. In contrast to the claimed invention, the '748 patent teaches one skilled in the art that cellophane is first dipped in a "preactivating solution," is washed in plain water and dried, and is then dipped in a "grafting solution" that does not include all of the ingredients of the applicant's claimed "coating composition" and does not utilize those components in the claimed weight percentages. Moreover, as noted above, cellophane can not be utilized as an oil, fuel, coolant or air filter material. This confirms the different nature of the invention disclosed and taught in the '748 patent. Accordingly, the '748 patent does not anticipate or render obvious the claimed invention.

The '369 patent also fails to disclose or suggest the claimed invention. The '369 patent is directed to specific liquid hydrocarbon fuel compositions, such as low-sulfur diesel and low-sulfur gasoline fuel compositions. Those compositions require the use of boric acid in a liquid hydrocarbon fuel. These requirements and components are completely unlike the claimed "coating composition" and an oil, fuel, coolant or air filter material. Moreover, the '369 patent discloses and teaches the stabilization of boric acid by forming a reaction product with a chemically grafted liquid hydrocarbon fuel. See, for example, column 3, lines 34-35. As specifically taught by the '369 patent, the boric acid chemically grafted liquid hydrocarbon fuel reaction product is prepared by first adding one or more surfactants to a liquid monomer or prepolymer. See, for example, column 4, lines 36-38. Sufficient surfactants are used so that when the particulate boric acid is added to the monomer/prepolymer/surfactant mixture, the macro globule particles of the boric acid are broken up and prevented from reforming. See, for example, column 4, lines 43-47. After adding the boric acid, the liquid hydrocarbon fuel is

added and the resulting mixture is stirred vigorously until it is homogeneous. See, for example, column 4, lines 53-55. After further additions of other ingredients, a graft initiator is finally added after the fuel has long since been added. See, for example, column 5, lines 17-18. This disclosure of a different process, different ingredients, and in different amounts does not disclose or render obvious the claimed invention.

In view of the claimed subject matter and the foregoing remarks, applicant respectfully requests the withdrawal of the Section 102 and Section 103 rejections.

In closing, applicant submits that this case is in condition for allowance and earnestly solicits a notice to that effect. If the examiner has any questions concerning this case, the undersigned may be contacted at 703-816-4009.

Respectfully submitted,

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